

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1514is8-3.3#trpbf

(Engineering Calculation)

SOIC

(printed on: 2020-07-11 21:39:05)

**TOTAL MASS (g) : 0.075395**

COMPONENT MATERIAL	VENDOR/ INDUSTRY NAMES	CONSTITUENT NAME	CAS NUMBER	CONSTITUENT MASS (g)	CONSTITUENT (PPM) OF MATERIAL	CONSTITUENT (PPM) OF TOTAL PKG.		
Active Device	Linear Technology	Silicon (Si)	7440-21-3	0.003540	1000000	46952.8046875		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.023653	975000	313721.6875		
		Iron (Fe)	7439-89-6	0.000582	24000	7719.35986328		
		Phosphorus (P)	7723-14-0	0.000007	300	92.8445358276		
		Zinc (Zn)	7440-66-6	0.000017	700	225.47958374		
		Nickel (Ni)	7440-02-0	0.000000	0	0		
		Silicon (Si)	7440-21-3	0.000000	0	0		
		Magnesium (Mg)	7439-95-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.000000	0	0		
<b>Lead Frame Total:</b>				<b>0.024259</b>	<b>1000000</b>	<b>321759.34375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001477	1000000	19588.234375		
		<b>External Plating Total:</b>				<b>0.001477</b>	<b>1000000</b>	<b>19588.234375</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000194	1000000	2573.11962891		
<b>Internal Plating Total:</b>				<b>0.000194</b>	<b>1000000</b>	<b>2573.11962891</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001019	750000	13515.5107422		
		Tin (Sn)	7440-31-5	0.000000	0	0		
		Lead (Pb)	7439-92-1	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.000000	0	0		
		Indium (In)	7440-74-6	0.000000	0	0		
		Metal Oxide		0.000000	0	0		
		Antimony (Sb)	7440-36-0	0.000000	0	0		
		Resin (EP)		0.000340	250000	4509.59130859		
<b>Die Attach Total:</b>				<b>0.001359</b>	<b>1000000</b>	<b>18025.1015625</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.006657	150000	88295.15625		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.036392	820000	482685.4375		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.001110	25000	14722.4902344		
		Carbon Black (C)	1333-86-4	0.000222	5000	2944.49804688		
		<b>Encapsulation Total:</b>				<b>0.044381</b>	<b>1000000</b>	<b>588647.625</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000185	1000000	2453.74829102		
					<b>TOTAL MASS (g) :</b>	<b>0.075395</b>		